



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960

JUN 16 2010

Mr. David Wilson
Chief, Bureau of Water
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

Dear Mr. Wilson:

The Environmental Protection Agency (EPA) has received the notice of action by the South Carolina General Assembly amending Section 48-1-83(A) of the South Carolina Pollution Control Act (SCPCA). The purpose of this letter is to approve the revised section of the SCPCA which pertains to 61-68 Water Classifications and Standards D Antidegradation Rules 4 a and b. On March 25, 2010, the SCPCA amendments were ratified by the State Legislature and on March 30, 2010, the Governor of South Carolina signed the amendments into law. South Carolina submitted this amendment to EPA for review given that these state statutory amendments have a direct impact on South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-68 Water Classifications and Standards. This change to the State law is considered a change to water quality standards and requires EPA action in accordance with Clean Water Act (CWA) §303(c)(3) and 40 CFR 131.21 (Alaska Rule). The amended Section 48-1-83(A) of the SCPCA has been submitted to EPA for approval and efficacy for all CWA purposes.

The change to the SCPCA would allow depressions in dissolved oxygen concentration of up to 0.1 mg/l in naturally low dissolved oxygen waterbodies. Current SCDHEC Regulation at 61-68 Water Classifications and Standards which is superceded by this change is as follows:

D. Antidegradation Rules

4. Certain natural conditions may cause a depression of dissolved oxygen in surface waters while existing and classified uses are still maintained. The Department shall allow a dissolved oxygen depression in these naturally low dissolved oxygen waterbodies as prescribed below pursuant to the Act, Section 48-1-83, et seq., 1976 Code of Laws:

a. For purposes of section D of this regulation, the term “naturally low dissolved oxygen waterbody” is a waterbody that, between and including the months of March and October, has naturally low dissolved oxygen levels at some time and for which limits during those months shall be set based on a critical condition analysis. The term does not include the months of November through February unless low dissolved oxygen levels are known to exist during those months in the waterbody. For a naturally low dissolved oxygen waterbody, the quality of the surface waters shall not be cumulatively lowered more than 0.10 mg/l for dissolved oxygen from point sources and other activities; or


b. Where natural conditions alone create dissolved oxygen concentrations less than 110 percent of the applicable water quality standard established for that waterbody, the minimum acceptable concentration is 90 percent of the natural condition. Under these circumstances, an anthropogenic dissolved oxygen depression greater than 0.10 mg/l shall not be allowed unless it is demonstrated that resident aquatic species shall not be adversely affected pursuant to Section 48-1-83. The Department may modify permit conditions to require appropriate instream biological monitoring.

It is EPA's goal to have water quality criteria and measurements of water quality that are meaningfully accurate and consistent in order to provide clarity for waterbody assessment and CWA purposes. The number of significant figures represented in numeric criteria are the number of figures or digits that have meaning, as estimated from the accuracy and precision of the instrument with which a waterbody is monitored, and the data that the measuring instrument yields. The revision to the SCPCA from 0.10 to 0.1 mg/l affecting 61-68 Water Classifications and Standards D 4 a and b is consistent with the accuracy of the data used to calculate water quality criteria values and represents the inherent variability in both the *in situ* monitoring equipment as well as modeling based on monitoring data. This revision is consistent with accepted scientific practices including rounding and significant figure practices contained in *Standard Methods for the Examination of Water and Wastewater*, in “Part 1050 Expression of Results, B Significant Figures”(American Public Health Association (APHA), American Water Works Association (AWWA), and Water Environment Federation (WEF); 18th, 19th, 20th, or subsequent Editions). The revision of the SCPCA is considered scientifically defensible and reasonable in setting protective criteria values.

Based on the rationale outlined above, it is EPA's opinion that the revision from 0.10 to 0.1 mg/l contained in the SCPCA is consistent with EPA regulation at 40 CFR § 131.11(b)(1). The criterion is based on Clean Water Act 304(a) guidance for site specific conditions and is based on scientifically defensible methods. EPA understands that after the State regulation contained at 61-68 Water Classifications and Standards Section D Antidegradation Rules is revised to conform with the SCPCA amendments, the revised regulations will be submitted to EPA with the State's triennial review revision package.

EPA hereby approves the revision to Section 48-1-83(A) of the SCPCA which was signed into law on March 30, 2010, by the Governor. The revision is hereby effective for all CWA purposes. If you have questions, please contact me at 404-562-9345, or have your staff contact Joel Hansel, South Carolina Water Quality Standards Coordinator, at 404-562-9274.

Sincerely,



James D. Giattina
Director
Water Protection Division